

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019067**Date Inspected:** 26-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Mr. Tian lei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder(OBG)**Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY- 1

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07932.

Visual Testing (VT)

This QA performed along with Caltrans QA Mr. Rene Hernandez random VT of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. The members are identified as OBG Cable tray support (miscellaneous) plate weld Components. Total of 18 components tested. The component designations are review as follows:

1. SA3098C, G, D, F
2. SA3050A
3. SA343A, B
4. SA3344A, B

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This QA Inspector Randomly observed the following work in progress:

ZPMC personnel heat straightening OBG member identified as 20TR2-043. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Tian lei was present to monitor the heat straightening process. The heat straightening appeared to comply with the Caltrans Engineer approved Heat Straightening Report (HSR) HSR (B)-362.

BAY- 3

Shielded Metal Arc Welding (SMAW) welding of weld joint SP3071-001-101,111. Welder is identified as 037996. ZPMC Quality Control (QC) is identified as Mr. Wang liyang. The welding variables appeared to comply with the Applicable WPS: WPS-B-P-2213-TC-U4b.

Flux Cored Arc Welding (FCAW) welding of weld joint AH3150A-113,114. Welder is identified as 50977. ZPMC Quality Control (QC) is identified as Mr. Wang liyang. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132-ESAB.

BAY- 4

This QA observed that no significant work was being performed in this bay during the time QA was present.

BAY- 7-Cross beam(CB)-CB19.

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 07933.

VT

This QA performed along with Caltrans QA Mr. Shailesh wadkar and Mr. Sean Mc Guair random VT of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. The members are identified as OBG CB 19 weld Components. The VT tested welds which are connected to stiffeners, bottom plates, side plates, intermediate plate stiffeners, deck plates and diaphragm welds. The component designations are review as follows: During VT review of welds located on CB19, this QA observed one longitudinal Linear indication on weld toe (toe crack) measuring approximately 30 mm in length. The weld is identified as: BP3097-1-001-014.

The “Y” location is approximately 0 from the cope hole. The weld is fillet joining to I Rib stiffener to Floor beam. The weld is complete joint penetration.

This QA informed to lead QA, Lead QA informed this QA that incident report would be generated after completion of segment tagging of this CB.

BAY- 8

SMAW welding of weld joint BK004A5-064-112. Welder is identified as 069894. ZPMC Quality Control (QC) is identified as Mr. Liu fa wen. The welding variables appeared to comply with the Applicable WPS:

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WPS-B-P-2213-B-U2.

FCAW welding of weld joint BK004A6-059-023,024. Welder is identified as 500479. ZPMC Quality Control (QC) is identified as Mr. Liu fa wen. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer
